INTERNATIONAL JOURNAL OF PHARMACEUTICS

VOL. 68 NO. 1–3 CONTENTS 1 FEBRUARY 1991

Announcement from the Publisher v

Invited Review

Vehicular influence on transdermal drug penetration
H. Loth (Germany) 1

Research Papers

Pharmacokinetic interactions of norfloxacin with some metallic medicinal agents
A.O. Okhamafe, J.O. Akerele and C.S. Chukuka (Nigeria) 11

Effect of variables on the preparation of shellac microcapsules by solvent evaporation technique: Part 1
D.S. Sheorey, A.S. Shastri and A.K. Dorle (India) 19

Some physicochemical properties of glassy felodipine
J. Kerč, S. Srčič, M. Mohar and J. Šmid-Korbar (Yugoslavia) 25

Investigation of piroxicam polymorphism
F. Vrečer, S. Srčič and J. Šmid-Korbar (Yugoslavia) 35

Partition and transport of verapamil and nicotine through artificial membranes
P. Santi, P.L. Catellani, P. Colombo, C. Ringard-Lefebvre, C. Barthélémy and A.-M. Guyot-Hermann (Italy, France) 43

Moisture sorption and tensile strength of some tableted direct compression excipients
S. Malamataris, P. Goidas and A. Dimitriou (Greece) 51

Pharmacokinetics of 5-fluorouracil after intravenous infusion of 5-fluorouracil-acetic acid-human serum albumin conjugates to rabbits
S.M. Chung, E.J. Yoon, S.H. Kim, M.G. Lee, H. Lee, M.K. Park and C.-K. Kim (Korea) 61

Approaches to improve the association of amikacin sulphate to poly(alkylcyanoacrylate) nanoparticles
M.J. Alonso, C. Losa, P. Calvo and J.L. Vila-Jato (Spain) 69

Synthesis and enzymatic hydrolysis of aspirin-basic amino acid ethyl esters
H. Tsunematsu, E. Ishida, S. Yoshida and M. Yamamoto (Japan) 77

A new biodegradable implant consisting of waxy-type poly(ϵ-caprolactone-co-δ-valerolactone) and estramustine
K. Imasaka, M. Yoshida, H. Fukuzaki, M. Asano, M. Kumakura, T. Mashimo, H. Yamanaka and T. Nagai (Japan) 87

Disposition of ibuprofen enantiomers following the oral administration of a novel controlled release formulation to healthy volunteers
A. Avgerinos, A. Noormohammadi and A.J. Hutt (U.K.) 97

Complexation behaviour of azathioprine with metal ions
S. Singh, M. Gulati and R.L. Gupta (India) 105

(Contents continued on p. 294)

© 1991 Elsevier Science Publishers B.V. (Biomedical Division). All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher, Elsevier Science Publishers B.V. (Biomedical Division), P.O. Box 1527, 1000 BM Amsterdam, The Netherlands.

Submission of a paper to this journal entails the author's irrevocable and exclusive authorization of the publisher to collect any sums or considerations for copying or reproduction payable by third parties (as mentioned in article 17 paragraph 2 of the Dutch Copyright Act of 1912 and in the Royal Decree of June 20, 1974 (S. 351) pursuant to article 16b of the Dutch Copyright Act of 1912) and/or to act in or out of Court in connection therewith.

Special regulations for readers in the U.S.A. This journal has been registered with the copyright Clearance Center, Inc. Consent is given for copying of articles for personal or internal use, or for the personal use of specific clients. This consent is given on the condition that the copier pays through the Center the per-copy fee stated in the code on the first page of each article for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. The appropriate fee should be forwarded with a copy of the first page of the article to the Copyright Clearance Center, Inc., 27 Congress Street, Salem, MA 01970, U.S.A. If no code appears in an article, the author has not given broad consent to copy and permission to copy must be obtained directly from the author. All articles published prior to 1980 may be copied for a per-copy fee of US $2.25, also payable through the Center. This consent does not extend to other kinds of copying, such as for general distribution, resale, advertising and promotion purposes, or for creating new collective works. Special written permission must be obtained from the publisher for such copying.

Special regulations for authors. Upon acceptance of an article by the journal, the author(s) will be asked to transfer copyright of the article to the publisher. This transfer will ensure the widest possible dissemination of information.

Cited in: Current Contents (Life Sciences; Clinical Practice); International Pharmaceutical Abstracts; Biological Abstracts; Chemical Abstracts; Excerpta Medica EMBASE; PASCAL M; Science Citation Index

Printed in The Netherlands

(Contents continued from back cover)

Nanoparticles of polyisohexylcyanoacrylate (PIHCA) as carriers of primaquine: formulation, physico-chemical characterization and acute toxicity
R. Gaspar, V. Préat and M. Roland (Belgium) 111
The effect of poloxamer-407 on liposome stability and targeting to bone marrow: comparison with polystyrene microspheres
S.M. Moghimi, C.J.H. Porter, L. Illum and S.S. Davis (U.K.) 121
Solvent effects on the harvesting of stratum corneum from hairless mouse skin through adhesive tape stripping in vitro
J.-C. Tsai, M.J. Cappel, N.D. Weiner, G.L. Flynn and J. Ferry (U.S.A., Germany) 127
The cytoskeleton of the cornea and its role in tight junction permeability
Y. Rojanasakul and J.R. Robinson (U.S.A.) 135
Permeability of latex membranes to anti-cancer drugs
R.M. Mader, B. Rizovski, G.G. Steger, K. Moser, H. Rainer and C. Dittrich (Austria) 151
Effects of molecular coatings on the compression and tableting of some pharmaceutical powders
N. Pilpel, C.I. Igwilo and S. Malamataris (U.K.) 157
Influence of dissolution rate on the extent and rate of bioavailability of metoprolol
A. Sandberg, B. Abrahamsson and J. Sjögren (Sweden) 167
Methotrexate: Existence of different types of solid
H.-K. Chan and I. Gonda (Australia) 179
Lipidic peptides. II. Synthesis, activity and transport of anti-inflammatory benzoquinolizine-lipidic peptide conjugates
I. Toth, R.A. Hughes, M.R. Munday, C.A. Murphy, P. Mascagni and W.A. Gibbons (U.K.) 191
Gastrointestinal transit of a multiparticulate tablet formulation in patients with active ulcerative colitis
S.S. Davis, C. Robertson and I.R. Wilding (U.K.) 199
Effect of water content on the microstructure of an o/w cream
L. Niemi and E. Laine (Finland) 205
Synthesis, characterization and in vitro evaluation of various sulfonamide chemical delivery systems
M.E. Brewster, M. Deyrup, K. Seyda and N. Bodor (U.S.A.) 215
Effect of extracellular pH on cytoplasmic pH and mechanism of pH regulation in cultured bovine corneal endothelium: Possible importance in drug transport studies
M.E. Dowty and P. Braquet (U.S.A., France) 231
Influence of novel percutaneous absorption enhancers, cyclohexanone and piperidone derivatives, on histopathology of rat skin
D. Quan, K. Takayama, T. Mitsuzono, K. Isowa and T. Nagai (Japan, China) 239
A new type of a pH-independent controlled release tablet
N. Kohri, H. Yatabe, K. Iseki and K. Miyazaki (Japan) 255
Effect of uptake of albumin microspheres on cellular activity of mouse peritoneal macrophages
J. Saunders, S.S. Davis, C.G. Wilson and A. Smith (U.K.) 265
Effects of cyclodextrins on *N*-trifluoroacetyldoxorubicin-14-valerate (AD-32) stability and solubility in aqueous media
O. Bekers, J.H. Beijnen, Y.A.G. Kempers, A. Bult and W.J.M. Underberg (The Netherlands) 271
Lipid emulsion content and vitamin A stability in TPN admixtures
D.P. Bluhm, R.S. Summers, M.M.J. Lowes and H.H. Dürrheim (Republic of South Africa) 277

Notes
Influence of container on vitamin A stability in TPN admixtures
D.P. Bluhm, R.S. Summers, M.M.J. Lowes and H.H. Dürrheim (Republic of South Africa) 281
Permeability characteristics of cultured mouse keratinocytes compared to hairless mouse skin
P.K. Shah, R.L. Bartel and R.T. Borchardt (U.S.A.) 285

Author index 289

Noticeboard 293

Rapid Communication
A controlled release matrix using a mixture of hydrophilic and hydrophobic polymers
H. Al-Hmoud, M. Efentakis and N.H. Choulis (Greece) R1